



和光新能源
HEGATECH



HGT-S144/M6H

166 Half Cell Series

435-460W

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE

Product Advantages



High Power Output
Compared to 158.75mm module, the power output can increase 25W-30W



High Reliability
Passed 3*IEC standard test



Low Hot-spot Risk
1/2 current reducing the hot spot temperature



Excellent loading capability
2400Pa wind loads, 5400Pa snow loads



Low NMOT
As low as 43°C, improving the power generation efficiency

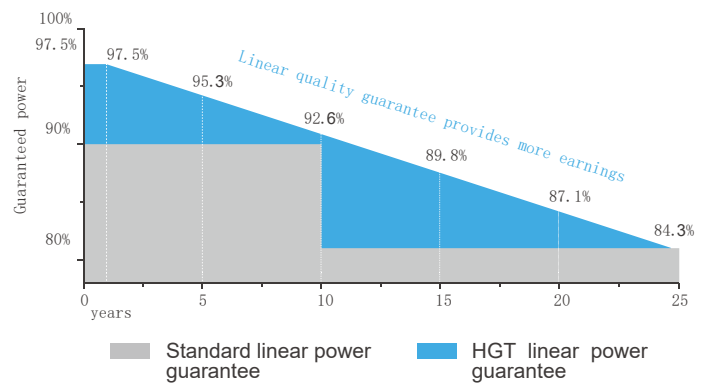


Half Cell, MBB Technology
Series-then-parallel cell connection design, more reliable soldering technology

20.8%
Module efficiency

460W
Highest power output

Product Guarantee



-2.50%
Firstyear power degradation

-0.55%
Annual degradation

12
Years
Materials and workmanship warranty

25
Years
Linear power warranty

Product Certification



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Electrical Characteristics

STC	460	455	450	445	440	435
Maximum power at STC (Pmax)	460W	455W	450W	445W	440W	435W
Optimum Operating Voltage (Vmp)	41.8V	41.6V	41.4V	41.2V	41.0V	40.8V
Optimum Operating Current (Imp)	11.01A	10.94A	10.87A	10.81A	10.74A	10.67A
Open Circuit Voltage (Voc)	49.6V	49.4V	49.2V	49.0V	48.8V	48.6V
Short Circuit Current (Isc)	11.25A	11.68A	11.61A	11.54A	11.47A	11.40A
Module Efficiency	20.8%	20.6%	20.4%	20.1%	19.9%	19.7%
Operating Module Temperature	-40 °C to +85 °C					
Maximum System Voltage	1500 V DC					
Maximum Series Fuse Rating	20 A					
Power Tolerance	0/+5W					

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

NM OT	460	455	450	445	440	435
Maximum Power at NMOT (Pmax)	356.80W	352.24W	348.10W	335W	331.2W	327.5W
Optimum Operating Voltage (Vmp)	39.6V	39.4V	39.2V	38.5V	38.3V	38.1V
Optimum Operating Current (Imp)	9.01A	8.94A	8.88A	8.70A	8.65A	8.59A
Open Circuit Voltage (Voc)	47.8V	47.6V	47.4V	46.8V	46.6V	46.4V
Short Circuit Current (Isc)	8.96A	9.42A	9.36A	9.19A	9.14A	9.08A

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

Temperature Characteristics

Nominal Module Operating Temperature(NM OT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.37 %/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050 %/°C

Mechanical Characteristics

Solar Cell	Monocrystalline silicon 166 mm (9BB)
No. of Cells	144 (6 × 24)
Dimensions	2108 × 1048 × 40 mm
Weight	24 kgs
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² Portrait: (-) 350 mm and (+) 160mm in length Landscape: (-) 1200mm and (+) 1200 mm in length or customized length
Connectors	FORSOL:SIKE6, Renhe:05-8, Renhe:05-9, Zerun:Z4S-abcde
Fire Safty Rate	Class C

Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	26	26+1
Pallets per container	5	22
Pieces per container	130	594

